



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931022
Component
Natural Gas Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119225	GFL0112692	GFL0100350
Sample Date		Client Info		27 May 2024	14 May 2024	09 Nov 2023
Machine Age	hrs	Client Info		5967	5884	4691
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	N/A	Changed
Filter Changed		Client Info		Not Changed	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	8	34	29
Chromium	ppm	ASTM D5185(m)	>5	0	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	1	2
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	5	▲ 29	22
Lead	ppm	ASTM D5185(m)	>40	<1	9	13
Copper	ppm	ASTM D5185(m)	>150	<1	2	3
Tin	ppm	ASTM D5185(m)	>4	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

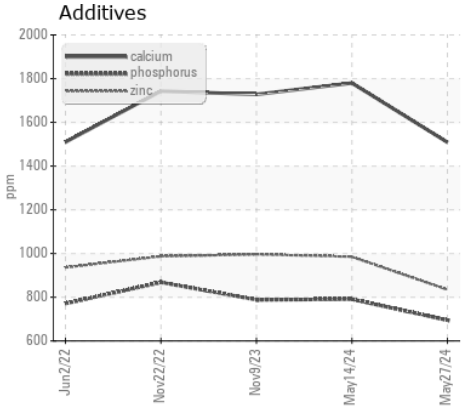
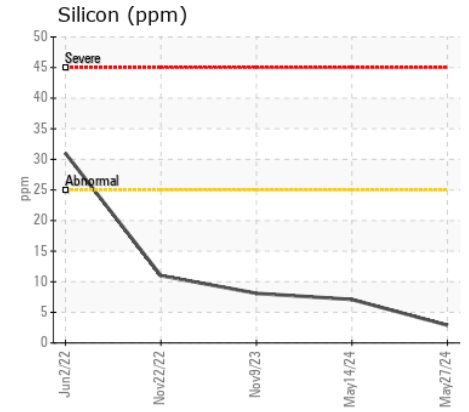
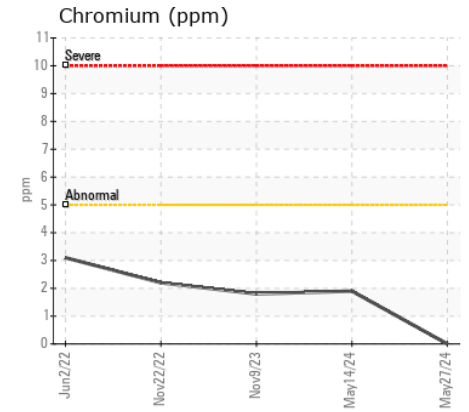
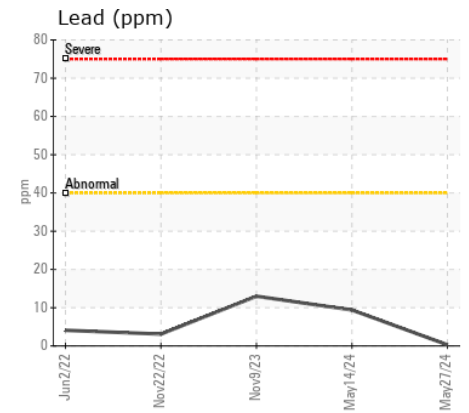
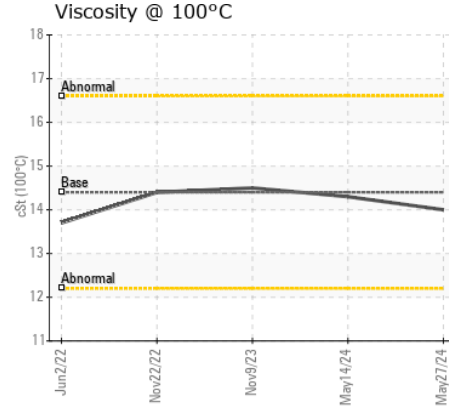
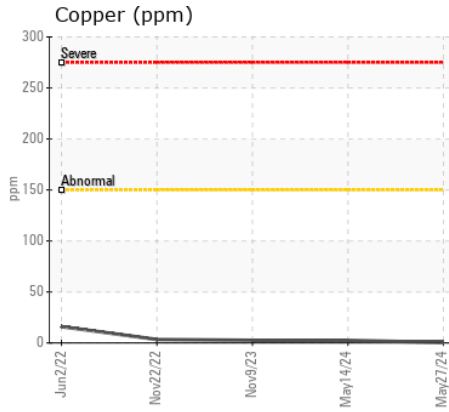
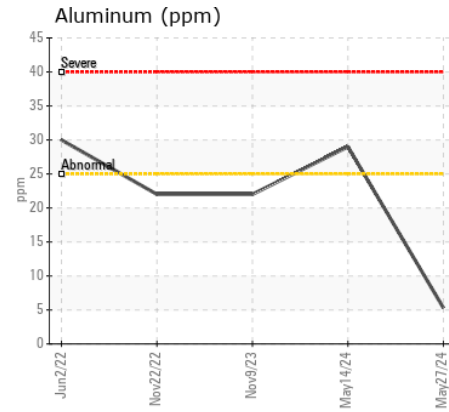
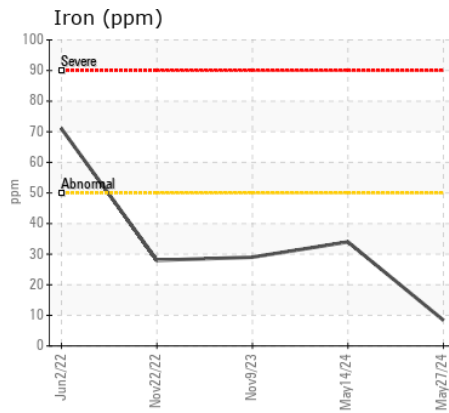
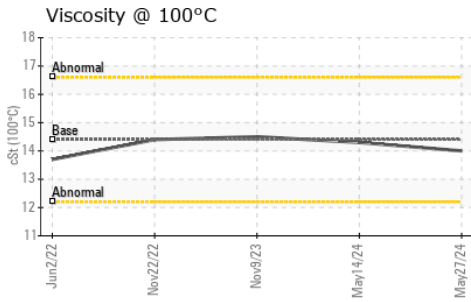
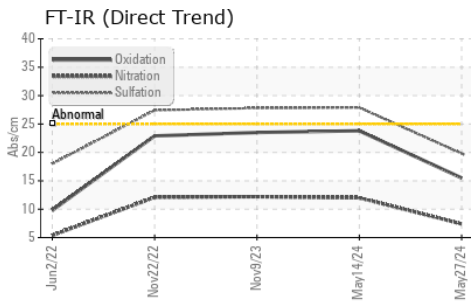
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	7	8
Potassium	ppm	ASTM D5185(m)	>20	1	8	8
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		---	---	---
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.4	12.0	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	27.9	27.8
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>158	5	11	10
Boron	ppm	ASTM D5185(m)	250	39	7	8
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	48	62	58
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	535	635	634
Calcium	ppm	ASTM D5185(m)	3000	1509	1780	1728
Phosphorus	ppm	ASTM D5185(m)	1150	695	791	788
Zinc	ppm	ASTM D5185(m)	1350	835	985	996
Sulfur	ppm	ASTM D5185(m)	4250	1962	2022	1973
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.5	23.8	23.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.0	14.3	14.5



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119225
Lab Number : 02639058
Unique Number : 5788220
Test Package : MOB 1

Received : 31 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9

Contact: Natalia Stalynska
 nstalynska@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

T:
F: